

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-6. (*Cancelled*)

7. (*Currently Amended*) A computer program product for controlling a computer to detect malware, said computer program product comprising:

file access request receiving logic operable to receive at an assessment computer a file access clearance request from a requesting computer, said file access clearance request including data identifying a computer file to be accessed by said requesting computer;

file access clearance response generating logic operable in dependence upon said data identifying said computer file to determine if said computer file has previously been assessed as not containing malware and to generate a file access clearance response; and

file access clearance response transmitting logic operable to transmit said file access clearance response to said requesting computer;

wherein said assessment computer stores a database of computer files and said database includes for each computer file a persistence flag indicating whether an entry relating to said computer file should be purged from said database during purge operations.

8. (*Original*) A computer program product as claimed in claim 7, wherein said data identifying said computer file includes a checksum value calculated from said computer file.

9. *(Original)* A computer program product as claimed in claim 7, wherein said data identifying said computer file includes one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file.

10. *(Original)* A computer program product as claimed in claim 7, wherein if said file access clearance response indicates a scan of said computer file is required by said assessment computer, then computer file receiving logic is operable to receive at said assessment computer said computer file from said requesting computer and performing a malware scan of said computer file.

11. *(Original)* A computer program product as claimed in claim 7, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said assessment computer.

12. *(Currently Amended)* A computer program product as claimed in claim 7, wherein said ~~assessment computer stores a database of computer files previously assessed as to~~specifies whether ~~they~~ respective computer files contain malware.

13. *(Currently Amended)* A computer program product as claimed in claim 12, wherein said database includes for each computer file fields specifying one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file, a checksum value calculated from said computer file, ~~an~~file and an access flag indicating

~~whether access to said computer file is denied and a persistence flag indicating whether entries relating to said computer file should be purged from said database during purge operations.~~

14. *(Original)* A computer program product as claimed in claim 7, wherein said assessment computer is operable in at least a higher level security mode and a lower level security mode, said assessment computer serving to deny access to greater range of computer files when operating in said higher level security mode compared with said lower level security mode.

15. *(Original)* A computer program product as claimed in claim 14, wherein said assessment computer is triggered to change from said lower level security mode to said higher level security mode by a lock down trigger message received at said assessment computer from a remote computer.

16. *(Original)* A computer program product as claimed in claim 7, wherein a plurality of requesting computers share access to an assessment computer for determining whether file access requests by those requesting computers should be denied.

17. *(Currently Amended)* A computer program product for controlling a computer to detect malware, said computer program product comprising:

file access request detecting logic operable to detect a file access request to a computer file by a requesting computer;

file access clearance request generating logic operable to generate a file access clearance request including data identifying said computer file;

file access clearance request transmitting logic operable to transmit said file access clearance request from said requesting computer to an assessment computer responsible for assessment of whether said computer file contains malware;

file access clearance request receiving logic operable to receive at said assessment computer said file access clearance request from a requesting computer;

file access clearance response generating logic operable in dependence upon said data identifying said computer file to determine if said computer file has previously been assessed as not containing malware and to generate a file access clearance response;

file access clearance response transmitting logic operable to transmit said file access clearance response to said requesting computer;

file access clearance response receiving logic operable to receive at said requesting computer said file access clearance response from said assessment computer; and

file access permitting logic operable if said file access clearance response indicates said computer file does not contain malware to permit said file access request by said requesting computer;

wherein said assessment computer stores a database of computer files and said database includes for each computer file a persistence flag indicating whether an entry relating to said computer file should be purged from said database during purge operations.

18. (Original) A computer program product as claimed in claim 17, wherein said data identifying said computer file includes a checksum value calculated from said computer file.

19. *(Original)* A computer program product as claimed in claim 17, wherein said data identifying said computer file includes one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file.

20. *(Original)* A computer program product as claimed in claim 17, wherein if said file access clearance response indicates a scan of said computer file is required by said assessment computer, then computer file transmitting logic is operable to transmit said computer file from said requesting computer to said assessment computer, receiving at said assessment computer said computer file from said requesting computer and performing a malware scan of said computer file.

21. *(Original)* A computer program product as claimed in claim 17, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said assessment computer.

22. *(Original)* A computer program product as claimed in claim 17, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said requesting computer.

23. *(Currently Amended)* A computer program product as claimed in claim 17, wherein said ~~assessment computer stores a database of computer files previously assessed as to~~ whether they specify whether respective computer files contain malware.

24. (*Currently Amended*) A computer program product as claimed in claim 23, wherein said database includes for each computer file fields specifying one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file, a checksum value calculated from said computer file, ~~an~~file and an access flag indicating whether access to said computer file is denied ~~and a persistence flag indicating whether entries relating to said computer file should be purged from said database during purge operations.~~

25. (*Original*) A computer program product as claimed in claim 17, wherein said assessment computer is operable in at least a higher level security mode and a lower level security mode, said assessment computer serving to deny access to greater range of computer files when operating in said higher level security mode compared with said lower level security mode.

26. (*Original*) A computer program product as claimed in claim 25, wherein said assessment computer is triggered to change from said lower level security mode to said higher level security mode by a lock down trigger message received at said assessment computer from a remote computer.

~~28~~27. (*Currently Amended*) A computer program product as claimed in claim 17, wherein a plurality of requesting computers share access to an assessment computer for determining whether file access requests by those requesting computers should be denied.

29-34. (*Cancelled*)

3534. (*Currently Amended*) A method of detecting malware, said method comprising the steps of:

receiving at an assessment computer a file access clearance request from a requesting computer, said file access clearance request including data identifying a computer file to be accessed by said requesting computer;

in dependence upon said data identifying said computer file determining if said computer file has previously been assessed as not containing malware and generating a file access clearance response; and

transmitting said file access clearance response to said requesting computer;

wherein said assessment computer stores a database of computer files and said database includes for each computer file a persistence flag indicating whether an entry relating to said computer file should be purged from said database during purge operations.

3635. (*Currently Amended*) A method as claimed in claim 3534, wherein said data identifying said computer file includes a checksum value calculated from said computer file.

3736. (*Currently Amended*) A method as claimed in claim 3534, wherein said data identifying said computer file includes one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file.

3837. (*Currently Amended*) A method as claimed in claim 3534, wherein if said file access clearance response indicates a scan of said computer file is required by said assessment computer, then receiving at said assessment computer said computer file from said requesting computer and performing a malware scan of said computer file.

3938. (*Currently Amended*) A method as claimed in claim 3534, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said assessment computer.

4039. (*Currently Amended*) A method as claimed in claim 3534, wherein said ~~assessment computer stores a database of computer files previously assessed as to whether they~~specifies whether respective computer files contain malware.

4140. (*Currently Amended*) A method as claimed in claim 4039, wherein said database includes for each computer file fields specifying one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file, a checksum value calculated from said computer file, ~~an~~file and an access flag indicating whether access to said computer file is denied ~~and a persistence flag indicating whether entries relating to said computer file should be purged from said database during purge operations.~~

4241. (*Currently Amended*) A method as claimed in claim 3534, wherein said assessment computer is operable in at least a higher level security mode and a lower level security mode,



said assessment computer serving to deny access to greater range of computer files when operating in said higher level security mode compared with said lower level security mode.

4342. (*Currently Amended*) A method as claimed in claim 3541, wherein said assessment computer is triggered to change from said lower level security mode to said higher level security mode by a lock down trigger message received at said assessment computer from a remote computer.

~~[[44]]~~43. (*Currently Amended*) A method as claimed in claim 3534, wherein a plurality of requesting computers share access to an assessment computer for determining whether file access requests by those requesting computers should be denied.

4544. (*Currently Amended*) A method of detecting malware, said method comprising the steps of:

detecting a file access request to a computer file by a requesting computer;  
generating a file access clearance request including data identifying said computer file;  
transmitting said file access clearance request from said requesting computer to an assessment computer responsible for assessment of whether said computer file contains malware;  
receiving at said assessment computer said file access clearance request from a requesting computer;  
in dependence upon said data identifying said computer file determining if said computer file has previously been assessed as not containing malware and generating a file access clearance response;

transmitting said file access clearance response to said requesting computer;  
receiving at said requesting computer said file access clearance response from said  
assessment computer; and

if said file access clearance response indicates said computer file does not contain  
malware, then permitting said file access request by said requesting computer;

wherein said assessment computer stores a database of computer files and said database  
includes for each computer file a persistence flag indicating whether an entry relating to said  
computer file should be purged from said database during purge operations.

4645. (*Currently Amended*) A method as claimed in claim 4544, wherein said data  
identifying said computer file includes a checksum value calculated from said computer file.

4746. (*Currently Amended*) A method as claimed in claim 4544, wherein said data  
identifying said computer file includes one or more of a filename of said computer file, data  
identifying said requesting computer and a storage location of said computer file.

4847. (*Currently Amended*) A method as claimed in claim 4544, wherein if said file  
access clearance response indicates a scan of said computer file is required by said assessment  
computer, then transmitting said computer file from said requesting computer to said assessment  
computer, receiving at said assessment computer said computer file from said requesting  
computer and performing a malware scan of said computer file.

~~4948.~~ *(Currently Amended)* A method as claimed in claim ~~4544~~, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said assessment computer.

~~5049.~~ *(Currently Amended)* A method as claimed in claim ~~4544~~, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said requesting computer.

~~5150.~~ *(Currently Amended)* A method as claimed in claim ~~4544~~, wherein said ~~assessment computer stores a database of computer files~~ specifies whether respective computer files ~~previously assessed as to whether they contain malware.~~

~~5251.~~ *(Currently Amended)* A method as claimed in claim ~~5150~~, wherein said database includes for each computer file fields specifying one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file, a checksum value calculated from said computer file, an file and an access flag indicating whether access to said computer file is denied ~~and a persistence flag indicating whether entries relating to said computer file should be purged from said database during purge operations.~~

~~5352.~~ *(Currently Amended)* A method as claimed in claim ~~4544~~, wherein said assessment computer is operable in at least a higher level security mode and a lower level security mode, said assessment computer serving to deny access to greater range of computer files when operating in said higher level security mode compared with said lower level security mode.

~~5453~~. (*Currently Amended*) A method as claimed in claim ~~5352~~, wherein said assessment computer is triggered to change from said lower level security mode to said higher level security mode by a lock down trigger message received at said assessment computer from a remote computer.

~~5554~~. (*Currently Amended*) A method as claimed in claim ~~4544~~, wherein a plurality of requesting computers share access to an assessment computer for determining whether file access requests by those requesting computers should be denied.

56-61. (*Cancelled*)

~~6261~~. (*Currently Amended*) Apparatus for controlling a computer to detect malware, said apparatus comprising:

a file access request receiver operable to receive at an assessment computer a file access clearance request from a requesting computer, said file access clearance request including data identifying a computer file to be accessed by said requesting computer;

a file access clearance response generator operable in dependence upon said data identifying said computer file to determine if said computer file has previously been assessed as not containing malware and to generate a file access clearance response; and

a file access clearance response transmitter operable to transmit said file access clearance response to said requesting computer;

wherein said assessment computer stores a database of computer files and said database includes for each computer file a persistence flag indicating whether an entry relating to said computer file should be purged from said database during purge operations.

6362. (Currently Amended) Apparatus as claimed in claim 6261, wherein said data identifying said computer file includes a checksum value calculated from said computer file.

6463. (Currently Amended) Apparatus as claimed in claim 6261, wherein said data identifying said computer file includes one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file.

6564. Apparatus as claimed in claim 6261, wherein if said file access clearance response indicates a scan of said computer file is required by said assessment computer, then a computer file receiver is operable to receive at said assessment computer said computer file from said requesting computer and performing a malware scan of said computer file.

6665. (Currently Amended) Apparatus as claimed in claim 6261, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said assessment computer.

6766. (Currently Amended) Apparatus as claimed in claim 6261, wherein said ~~assessment computer stores a database of computer files previously assessed as to whether they~~specifies whether respective computer files contain malware.

~~68~~67. (*Currently Amended*) Apparatus as claimed in claim ~~67~~66, wherein said database includes for each computer file fields specifying one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file, a checksum value calculated from said computer file, ~~an~~file and an access flag indicating whether access to said computer file is denied ~~and a persistence flag indicating whether entries relating to said computer file should be purged from said database during purge operations.~~

~~69~~68. (*Currently Amended*) Apparatus as claimed in claim ~~62~~61, wherein said assessment computer is operable in at least a higher level security mode and a lower level security mode, said assessment computer serving to deny access to greater range of computer files when operating in said higher level security mode compared with said lower level security mode.

~~70~~69. (*Currently Amended*) Apparatus as claimed in claim ~~69~~68, wherein said assessment computer is triggered to change from said lower level security mode to said higher level security mode by a lock down trigger message received at said assessment computer from a remote computer.

~~71~~70. (*Currently Amended*) Apparatus as claimed in claim ~~62~~61, wherein a plurality of requesting computers share access to an assessment computer for determining whether file access requests by those requesting computers should be denied.

~~7271~~. (*Currently Amended*) Apparatus for controlling a computer to detect malware, said apparatus comprising:

a file access request detector operable to detect a file access request to a computer file by a requesting computer;

a file access clearance request generator operable to generate a file access clearance request including data identifying said computer file;

a file access clearance request transmitter operable to transmit said file access clearance request from said requesting computer to an assessment computer responsible for assessment of whether said computer file contains malware;

a file access clearance request receiver operable to receive at said assessment computer said file access clearance request from a requesting computer;

a file access clearance response generator operable in dependence upon said data identifying said computer file to determine if said computer file has previously been assessed as not containing malware and to generate a file access clearance response;

a file access clearance response transmitter operable to transmit said file access clearance response to said requesting computer;

a file access clearance response receiver operable to receive at said requesting computer said file access clearance response from said assessment computer; and

a file access permission unit operable if said file access clearance response indicates said computer file does not contain malware to permit said file access request by said requesting computer;

wherein said assessment computer stores a database of computer files and said database includes for each computer file a persistence flag indicating whether an entry relating to said computer file should be purged from said database during purge operations.

7372. (Currently Amended) Apparatus as claimed in claim 7271, wherein said data identifying said computer file includes a checksum value calculated from said computer file.

7473. (Currently Amended) Apparatus as claimed in claim 7271, wherein said data identifying said computer file includes one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file.

7574. (Currently Amended) Apparatus as claimed in claim 7271, wherein if said file access clearance response indicates a scan of said computer file is required by said assessment computer, then a computer file transmitter is operable to transmit said computer file from said requesting computer to said assessment computer, receiving at said assessment computer said computer file from said requesting computer and performing a malware scan of said computer file.

7675. (Currently Amended) Apparatus as claimed in claim 7271, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said assessment computer.



~~77~~76. (*Currently Amended*) Apparatus as claimed in claim ~~72~~71, wherein if said file access clearance response indicates access to said computer file is denied, then triggering a denied access response in said requesting computer.

~~78~~77. (*Currently Amended*) Apparatus as claimed in claim ~~72~~71, wherein said ~~assessment~~ computer stores a database of computer files ~~previously assessed as to whether they~~specifies whether respective computer files contain malware.

~~79~~78. (*Currently Amended*) Apparatus as claimed in claim ~~78~~77, wherein said database includes for each computer file fields specifying one or more of a filename of said computer file, data identifying said requesting computer and a storage location of said computer file, a checksum value calculated from said computer file, ~~an~~file and an access flag indicating whether access to said computer file is denied ~~and a persistence flag indicating whether entries relating to said computer file should be purged from said database during purge operations.~~

~~80~~79. (*Currently Amended*) Apparatus as claimed in claim ~~72~~71, wherein said assessment computer is operable in at least a higher level security mode and a lower level security mode, said assessment computer serving to deny access to greater range of computer files when operating in said higher level security mode compared with said lower level security mode.

~~81~~80. (*Currently Amended*) Apparatus as claimed in claim ~~80~~79, wherein said assessment computer is triggered to change from said lower level security mode to said higher level security

mode by a lock down trigger message received at said assessment computer from a remote computer.

8281. (*Currently Amended*) Apparatus as claimed in claim 7271, wherein a plurality of requesting computers share access to an assessment computer for determining whether file access requests by those requesting computers should be denied.